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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,994	10/21/2004	Toshinobu Ogatsu	KPM-02301	8699

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EXAMINER	
NGO, HUNG V	

ART UNIT	PAPER NUMBER
2831	

DATE MAILED: 08/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/511,994	OGATSU, TOSHINOBU	
	Examiner	Art Unit	
	Hung V. Ngo	2831	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,6-14,17 and 18* is/are rejected.

7)☒ Claim(s) *4,5,15 and 16* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *10-21-04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 6, 8, 11, 13, 14, 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Suzuki et al (JP4-58596).

Re claim 1, Suzuki et al disclose a method of shielding a circuit device, comprising:

(a) providing a circuit board (1) on which an electronic component (2) has mounted and which has a ground connection portion (6);

(b) inserting an entire portion of said circuit board into a shield pack (4, 5) having a sack shape, said shield pack having an insulating layer (4) as an innermost layer and an electric conductive layer (5) as an outermost layer; and

(c) contacting said insulating layer of said shield pack with said electronic component and said circuit board (Fig 3),

wherein said ground connection portion of said circuit board is connected to said electric conducive layer of said shield pack (Fig 2, 4).

Re claim 2, wherein said (c) contacting step comprises:

(d) reducing an internal capacity of said shield pack (Figs 1-3).

Re claim 3, wherein said circuit board further comprises a ground connection terminal (3) connect to said ground connection portion, and

said ground connection terminal breaks through said shield pack to be connected with said electric conducive layer during said (c) contacting step (Fig 4).

Re claim 6, further comprising: connecting said ground connection portion and said electric conductive layer by passing an electric conductive connection component (3) through said ground connection portion between said shield pack and said circuit board, after said insulating layer of said shield pack is fit with said electronic component and said circuit board (Figs, 1, 2, 4).

Re claim 8, wherein said connection component is used to fix said circuit board contained within said shield pack to a housing, and said housing has an electric conductive portion connected to said electric conductive layer (Figs 2, 4).

Re claim 11, wherein said shield pack is made of thermal shrinkage material (abstract), and said (d) reducing step inherently comprises:

heating said shield pack such that said insulating layer of said shield pack contacts said electronic component and said circuit board.

Re claim 13, an electromagnetically shielded circuit device comprising:

a circuit board (1) on which an electronic component (2) has been mounted and which has a ground connection portion (6);

a sack-shaped shield pack (4, 5) which covers an entire portion of said circuit board (Fig 2, 4), said shield pack having an insulating layer (4) as an innermost layer and an electric conductive layer (5) as an outermost layer; and

an electric conductive connection component (3) which passes through said shield pack to said circuit board to connect said ground connection portion to said electric conductor layer of said shield pack (Fig 2, 4).

Re claim 14, wherein said connection component is a ground connection terminal (3) which is previously fixedly provided to said ground connection portion of said circuit board (Fig 2, 4).

Re claim 18, wherein said connection component is a vis, and is used to fix said circuit board (Fig 1c)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 7, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al (JP4-58596) in view of Nakayama et al (JP 2000223647).

The teaching of Suzuki et al as discussed above further includes said circuit board has a through-hole formed in said ground connection portion (Fig 1b), said

through-hole is filled with an electric conductor connected to said ground connection portion (Fig 1b), but does not disclose said connection component passes through said through-hole to connect said ground connection portion with said electric conductive layer.

Nakayama et al disclose a connection component (6a-6d) passes through a through-hole (5) to connect said ground connection portion with said electric conductive layer.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to rearrange the location of the connection component of Suzuki et al by placing the connection component passing through the through hole for providing stronger support for the connection component.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al (JP4-58596) in view of Babb et al (US 2002/0129951) and Isern-Flecha et al (US 5,557,064).

The teaching of Suzuki et al as discussed above does not disclose a vacuum-sucking air contained in the shield pack .

Isern-Flecha et al teach the use of a vacuum-sucking air for assisting with a conformable material that can be adapted to the shape of articles (col. 2, line 35). It would have been obvious to one of ordinary skill in the art at the time the invention was made to adopt the teaching of Isern-Flecha by employing the vacuum-sucking air with the structure of Suzuki et al for assisting with a conformable material that can be adapted to the shape of articles.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al (JP4-58596) in view of Babb et al (US 2002/0129951) and Isern-Flecha et al (US 5,557,064).

The teaching of Suzuki et al as discussed above further includes heating shielding pack (a heat shrinkable shield)(abstract) does not disclose an adhesive agent and vacuum-sucking air contained in the shield pack .

Babb et al teach the use of an adhesive agent to prevent dielectric coating from separating from the surface to which it is applied [0075]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the adhesive agent with the structure of Suzuki et al for the purpose of preventing dielectric coating from separating from the surface to which it is applied

Isern-Flecha et al teach the use of a vacuum-sucking air for assisting with a conformable material that can be adapted to the shape of articles (col. 2, line 35). It would have been obvious to one of ordinary skill in the art at the time the invention was made to adopt the teaching of Isern-Flecha by employing the vacuum-sucking air with the modified structure of Suzuki et al for assisting with a conformable material that can be adapted to the shape of articles.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al (JP4-58596) in view of Babb et al (2002/0129951).

The teaching of Suzuki et al as discussed above further includes heating shielding pack (a heat shrinkable shield)(abstract) does not disclose an adhesive agent (re claim 12)

Babb et al teach the use of an adhesive agent to prevent dielectric coating from separating from the surface to which it is applied [0075]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the adhesive agent with the structure of Suzuki et al for the purpose of preventing dielectric coating from separating from the surface to which it is applied

Allowable Subject Matter

Claims 4, 5, 15, 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance:

The limitation "a tip portion having a conical shape, and a base portion connected to said tip portion, wherein said base portion has a sectional area which is smaller than a bottom plane of said cone such that said base portion does not project from the bottom plane of said cone" in combination with other limitations present is neither taught nor disclosed in the prior art of record.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung V Ngo whose telephone number is (571) 272-1979. The examiner can normally be reached on Monday to Thursday 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean A Reichard can be reached on (571) 272-2800 EXT 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HVN
August 19, 2006

Hung V Ngo

HUNG V. NGO
PRIMARY EXAMINER